

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of Sections 309(j) and 337 of the)	WT Docket 99-87
Communications Acts of 1934 as Amended)	
)	
Promotion of Spectrum Efficient Technologies on)	RM-9332
Certain Part 90 Frequencies)	
)	

**REQUEST FOR WAIVER OF COMMISSION RULES
ON BEHALF OF
THE TOWNSHIP OF VOORHEES, NEW JERSEY**

The Township of Voorhees, New Jersey (“The County”), pursuant to Sections 1.3 and 1.925 of the Federal Communications Commission’s (“FCC” or “Commission”) Rules, hereby respectfully requests a waiver and extension of the January 1, 2013 deadline by which the Township, as a licensee of private land mobile radio services in the 150-174 MHz band, must migrate to narrowband (12.5 kHz or narrower) technology.¹

In accordance with DA-11-1189A 1, Guidance for Submission of Requests for Waiver of the Narrowbanding Deadlines², the Township of Voorhees respectfully requests a one year waiver and extension from narrowbanding its VHF Public Safety radio channels until December 31, 2013 (VHF radio channels listed in Appendix-A). The

¹ See *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Second Report and Order and Second Further Notice of Proposed Rulemaking, WT Docket No. 99-87, RM-9332, 18 FCC Rcd 3034 (2003); *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order, WT Docket No. 99-87, RM-9332, 19 FCC Rcd 25045 (2004); *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Order, WT Docket No. 99-87, RM-9332, 25 FCC Rcd 8861 (2010); 47 C.F.R. §§ 90.203(j), 90.209(b). The January 1, 2013 deadline will be referred to herein as the “narrowband deadline.”

² This waiver request is consistent with the Public Notice issued by the Commission on July 13, 2011, providing guidance on the submission of requests for waiver of the narrowband deadline. See *Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminder of January 1, 2013 Deadline for Transition to Narrowband Operations in the 150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters*, Public Notice, 26 FCC Rcd 9647 (2011) (“Public Notice”).

Township, in coordination with Camden County, NJ is currently working to migrate all operations, including Police, Fire and EMS radios off of their existing VHF channels to the Camden County's recently licensed 700 MHz channels.³

In support of this request, the following is shown:

A. Background of Applicant

Voorhees Township is located in central Camden County, New Jersey, with a population of approximately 29,100. Currently, the Voorhees Township Police Department operates a single site conventional VHF communications system to support Police communications for the entire Township. This system uses three (3) VHF frequencies, plus the State of New Jersey VHF Interoperability channels, SPEN-1 and SPEN-2.

In 2010, the Township entered into negotiations with Camden County to take over police dispatch operations and responsibility to manage the Police VHF radio equipment. Dispatch and radio communications for the Township's Fire and EMS departments has been handled by the County for many years. As part of the agreement to handle radio communications, the County agreed to include the Voorhees Township Police Department in the new 700 MHz radio communications system the County is currently building, with new mobile and portable radios. The Township determined that joining with the County on its new 700 MHz radio communications system was the best option to meeting the Commission's narrowband deadline and at the same time offering the Township Police County-wide interoperable communications.

³ In February 2012, the FCC granted Camden 700 MHz licenses under the Call Signs WQOV699, WQOV700, WQOW681 and WQOX962.

The County has procured and is currently building out a new nine (9) site 700 MHz digital trunked radio network. When all project stages are completed, the system will consist of a trunked, two (2) cell simulcast design in order to maximize frequency efficiency and provide 100% interoperable county-wide communications between all public safety users. Further, the system will operate in accordance with the Project 25 (P25) Phase 2 TDMA communications standards. Implementation of the P25 Phase 2 standards will allow seamless interoperable intra and inter-agency communications, allow the use of equipment available from multiple vendors and provide maximum radio spectrum efficiency. The P25 Phase 2 standards will implement 2:1 TDMA modulation on a 12.5 kHz channel, meeting all FCC narrowband mandates to date for one effective voice path per 6.25 kHz of spectrum. The final design consists of a total of 16 sites to provide the necessary coverage throughout its jurisdictional area. In order to accommodate two (2) simulcast cells, the 16 sites actually operate as 18 sites on the FCC licenses. The design has taken into account the need to limit its coverage area and minimize potential interference to other jurisdictions beyond the County border.

This project began in 2009 and it is anticipated that the system will launch at the end of fourth quarter 2012, with all Fire, EMS, County OEM Departments as well as the Voorhees Township Police Department transitioning from the VHF frequencies to the new system by the end of first quarter 2013. Therefore, the Township is seeking a waiver and extension of the narrowband deadline to December 31, 2013.

In the following outline response, we provide detailed information as stipulated by the Commission to support our waiver request.

B. Steps already taken to plan for, initiate, and complete the transition to narrowband operations

In 2010, the Township entered into negotiations with Camden County to take over police dispatch operations and responsibility to manage the Police VHF radio equipment. Dispatch and radio communications for the Township's Fire and EMS departments has been handled by the County for many years. As part of the agreement to handle radio communications, the County agreed to include Voorhees Township Police Department in the new 700 MHz radio communications system the County is currently building and not to extend funds to narrowband the Police Department's existing VHF equipment.

In 2007, the County engaged a telecommunications engineering consultant to investigate and identify potential solutions for the DTV interference severely disrupting the County's UHF-T conventional radio system and Public Safety communications. As part of the analysis, the consultant was asked to prepare a complete assessment of all of the County's radio communications equipment. The assessment addressed the current needs and future needs of the County's emergency first responders in the areas of coverage, capacity, functionality, features, interoperability within the County and to neighboring jurisdictions, as well as, age of the equipment and whether or not the equipment would meet the requirements of the Commission's pending narrowband deadline.

Based on the assessment, the County determined that the most cost effective and long-term solution to meet the needs of the emergency first responders and address the issue of the DTV interference in the UHF-T band and compliance with the narrowband deadline, was to design, license and procure a

new 700 MHz radio communications network. This solution was also in line with recommendations of the Commission's staff to investigate the use of "700 MHz public safety band as viable alternative, particularly in light of the approaching June 12, 2009 digital television transition date, and the Commission's actions in facilitating a nationwide, interoperable public safety network."⁴

In 2009, the County developed a long-term plan to transition all County emergency first responders to a new 700 MHz trunked radio network. The County's consultant prepared a system design and identified new base station tower locations.

In 2010, the County began the site acquisition process on the new tower locations, and the first tower of the new system at the County's Communication Center was constructed in Lindenwold, NJ.

In 2010, the County filed an application for 700 MHz public safety narrowband channels with the Region 28 Regional Planning Committee. That application was approved by the RPC in late 2010 and moved to Regional concurrence from the adjacent RPC's. Regional concurrence was received in late summer 2011. The County received its licenses in February, 2012.

Also in 2010, the County prepared a capital and operating budget to present to the County Freeholders in order to obtain the necessary funding. In early 2011, the County was able to secure \$20 million in funding for the procurement of the 700 MHz trunked radio system and construction of nine (9) of the proposed facilities.

⁴ On April 9, 2009, the Public Safety and Homeland Security Bureau sought comments on the Ocean County, NJ waiver request for adding frequencies UHF-T channel 15 band 476-482 MHz. DA 09-803 (PSHSB rel. Apr. 9, 2009).

In June of 2011, the County issued a Bid for the procurement and installation of the 700 MHz digital trunked radio system along with the subscriber equipment and microwave back-haul. The system also included new dispatch consoles to replace the, soon to be, obsolete equipment.

In November 2011, the County approved the purchase of the 700 MHz digital trunked radio system from Motorola Solutions of Schaumburg, IL.

In late April 2012, Motorola began installation of the base stations, Master Controller and dispatch console equipment at a number of locations in Camden County.

The initial 700 MHz system is designed to support the coverage and capacity requirements of the County's Fire, EMS and OEM Departments as well as the Voorhees Township Police Department. In order to meet those requirements, all nine (9) of the initial tower facilities need to be on line. As of June 2012, five (5) of the nine (9) facilities are completed and four (4) are under various stages of construction. The current project time table has the system being ready for site integration by the end of August 2012. The last of the nine (9) sites is planned to be completed by the end of September 2012. Once the last site is integrated, the County will begin System Optimization and Acceptance Testing. It is anticipated that this will take 30 to 45 days.

Once the system has been accepted, then Motorola can begin the installation of new mobile radios on more than 850 Fire, EMS and Police vehicles. The installation will be executed station by station, so that an entire company of Fire or EMS vehicles will be done simultaneously. In addition, the

new portable radios will be distributed at that same time, and then that entire company/station will go live on the new 700 MHz system. During the transition, the company/station will be hard patched between their new 700 MHz system talkgroup and the old VHF conventional system to insure seamless communications. This transition is anticipated to be completed in 90 days.

Once all the emergency first responders have migrated over to the new 700 MHz radio system, and are cleared from the VHF channels, the County and Voorhees Township will methodically cease operations on the wide-band VHF conventional repeaters and either upgrade or replace the existing VHF repeaters to narrowband operations prior to its requested narrowband extension date of December 31, 2013. The transition of the VHF repeaters to narrowband emissions will be conducted in coordination with the Fire and EMS units from the adjacent Counties who respond to mutual-aid requests within Camden County.

C. System size and complexity

Currently, the Voorhees Township Police Department operates a single site conventional VHF communications system to support Police communications for the entire Township. This system uses five (5) VHF frequencies.

Camden County is composed of 37 municipalities and boroughs. Within these jurisdictions are a total of 38 police agencies, 42 fire departments and 19 EMS departments. Currently, Camden County operates a multi-site conventional VHF communications system to support Fire and EMS communications for the entire county. This system uses twenty-eight (28) VHF frequencies. The County also conducts countywide police operations with a multi-zoned conventional

communications system utilizing twenty-five (25) UHF-T (506 - 512 MHz) channels, which is rapidly approaching end-of-life.

D. Whether system equipment is narrowband-capable or must be replaced or upgraded

A majority of the existing VHF wideband radio equipment utilized by the Voorhees Township Police Department is narrowband-capable and would need to be reprogrammed or replaced at an estimated cost of \$50,000. The Township will complete the narrowbanding of the VHF radios, in coordination with Camden County, following the move of its Police, Fire and EMS operations to 700 MHz.

E. Whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation

The Township, in coordination with Camden County, will be migrating all of its emergency first responder communications to the new Camden County 700 MHz radio communications system. In addition to Voorhees Township, the County will be migrating over all Fire and EMS in the County and the County OEM operations to the new 700 MHz digital trunked radio system. During the first stage of the project, the system will support 2,200 mobiles, portables and control stations. During the second stage of the project, the County will migrate an additional 2,000 Police mobiles, portables and control stations to the new 700 MHz digital trunked radio system. Once all Fire, EMS and County OEM operations, as well as Voorhees Township Police Department are cleared from the VHF channels, the County and Township will either upgrade or replace the existing VHF repeaters to narrowband operations prior to its requested

narrowband extension date of December 31, 2013. These channels will support inter-agency communications when Fire and EMS units from the adjacent Counties respond to mutual-aid requests within Camden County.

F. Funding sources, including whether the licensee's budget requires government approval or a multi-year budget process

The Camden County Department of Public Safety has been active in moving toward the realization of the proposed 700 MHz Radio Communications System. Camden County has received authorization and funding from the County Freeholders to purchase a \$20 million 700 MHz digital trunked radio communication system from Motorola (See Appendix-B). The County has funding to support the migration Fire, EMS and County OEM operations, as well as the Voorhees Township Police Department, but is still working to obtain funding for migration of the remaining Police agencies off of the UHF-T band to the 700 MHz trunked radio system.

G. Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationships or other interdependencies

It should be noted that the County's narrowbanding schedule is not dependent upon other neighboring systems because of interoperability relations or other interdependencies. It should also be noted that the County is coordinating narrowbanding activities for almost every Public Safety Agency in the County. The County is coordinating its narrowband activities, as well as, its migration to 700 MHz with the adjacent Counties in southern New Jersey. Many of its neighboring Counties, including Gloucester, Burlington and Ocean Counties have

similar plans to migrate to 700 MHz. As stated previously, once all Fire, EMS and County OEM operations are cleared from the VHF channels, the County will either upgrade or replace the existing VHF repeaters to narrowband operations prior to its requested narrowband extension date of December 31, 2013. These channels will support inter-agency communications when Fire and EMS units from the adjacent Counties respond to mutual-aid requests within Camden County.

H. Plans to minimize the negative impact of extended wideband operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area

The Voorhees Township Police Department currently has adjacent and co-channel users in the extended area around Camden County, but does not create nor receive any harmful interference from them. The County is coordinating narrowband activities on behalf of Voorhees Township, as well as, its migration to 700 MHz with the adjacent Counties in southern New Jersey. The County is working as expeditiously as possible to migrate Public Safety operations from the existing wide-band VHF channels to the new 700 MHz digital trunked radio system. From the outset of the 700 MHz project, the number one priority was to move Fire, EMS and OEM Departments, as well as Voorhees Township Police, first to the new system specifically because of the narrowband deadline. Voorhees Township Police is one of the only Police Departments within Camden County currently operating on VHF channels. The other Police Departments are all operating on UHF standard channels that were already narrowbanded, UHF-T

Band channels that no longer require narrowbanding⁵ or 800 MHz channels. Once the VHF channels are cleared of users, the County and Township will cease wide-band operations and begin the upgrade or replacement of the wide-band repeaters to narrowband emissions as well as reprogram or replace those mobile radios that will remain operational.

I. If the licensee plans to migrate to a non-VHF/UHF band (e.g., 700 MHz or 800 MHz), whether it will relinquish VHF/UHF spectrum once it has migrated and the amount of spectrum to be relinquished

The Township will retain all of its VHF channels, which will be used for interoperability with adjacent counties as well as the State of New Jersey mandated SPEN channels. The Township will complete the narrowbanding of the VHF radios, in coordination with Camden County, following the move of its Police, Fire and EMS operations to 700 MHz.

⁵ On April 26, 2012, the Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology waived the January 1, 2013 narrowbanding deadline for 470-512 MHz band frequencies. See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, Order, WT Docket No. 99-87, RM-9332, DA 12-642 (WTB/PSHSB/OET rel. Apr. 26, 2012).

**J. Licensees should also provide a proposed timetable for completion of narrowbanding that includes the following elements:
What steps in the process have been or will be taken prior to January 1, 2013**

In 2010, the Township entered into negotiations with Camden County to take over police dispatch operations and responsibility to manage the Police VHF radio equipment. Dispatch and radio communications for the Township's Fire and EMS departments has been handled by the County for many years. As part of the agreement to handle radio communications, the County agreed to include Voorhees Township Police Department in the new 700 MHz radio communications system the County is currently building. In 2009, the County initiated a project to design, license and procure a new state of the art digital trunked radio system and associated subscriber equipment. Below, is a summary of the Project Timeline to date, as well as, the anticipated dates to complete the transition from the current wideband operations to meet the narrowband mandate:

<u>Date</u>	<u>Activity</u>
01/01/2009	Initiated investigation of 700 MHz Base Site locations
07/01/2009	Began Base Site acquisition & construction process
04/02/2010	CIVIL WORK (Procurement & Build)
06/28/2010	File 700 MHz Application to RPC Region 28
10/01/2010	Pre-RFP solicitation from major equipment vendors
01/01/2011	Voorhees Police dispatch transferred to Camden County
04/01/2011	700 MHz RFP was developed
06/13/2011	700 MHz RFP Issued
11/17/2011	Camden County Freeholders approve purchase of \$20M 700 MHz System from Motorola
11/30/2011	Contract Awarded
01/09/2012	Project Kick – Off
02/09/2012	FCC issues 700 MHz Licenses to Camden County
03/27/2012	Factory Staging of System – at Motorola Schaumburg
04/05/2012	Base Station and Master Site Install begins
04/19/2012	Console Installation
04/26/2012	Develop Fleet mapping
06/01/2012	M/W Installation

07/06/2012	Control Station Installation
07/09/2012	First base station is placed into service
07/31/2012	Subscriber Equipment Receive and inventory
08/15/2012	Dispatch Operations Cut-Over
10/01/2012	System Optimization
10/15/2012	Audit and Acceptance Testing
11/02/2012	System Acceptance
11/05/2012	Mobile Subscriber Installation Start
11/05/2012	Program and Distribute Portables
01/30/2013	Subscriber equipment installation Complete
02/28/2013	30 Day Burn-In (Reliability Test) Complete
03/01/2013	Final Acceptance of 700 MHz System
04/01/2013	Cease operations on selected VHF conventional repeaters
12/31/2013	Install new or upgrade all VHF conventional repeaters

K. Anticipated dates of commencement and completion of:

- **Replacement or retuning of mobiles/portables**
- **Infrastructure replacement or retuning**

As previously discussed, Camden County is currently in the middle of the implementation of a new 700 MHz trunked radio system to support communications needs of the County's Fire, EMS and OEM first responders, as well as, the Voorhees Township Police Department. Once the migration to the new system is completed in first quarter 2013, the Township will cease wide-band operations on its VHF channels or replace the wide-band repeaters with narrowband equipment by December 31, 2013.

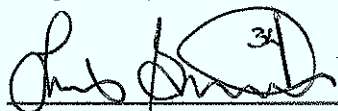
CONCLUSION

For the reasons set forth herein, The Township of Voorhees, New Jersey believes it satisfies all of the Commission's requirements for granting a waiver and extension of the narrowband deadline. The Township appreciates the Commission's concern regarding spectrum efficiency and worked diligently over the past three (3) years to address the looming narrowband deadline. However, delay in meeting the deadline has become inevitable due to (i) the size and complexity of Camden County's new 700 MHz radio system, (ii) the timing in obtaining the funding to build out the new 700 MHz radio system, (iii) the need to insure seamless and reliable communications to the Township's and County's emergency first responders. The Township has researched and analyzed whether to upgrade its existing conventional VHF radio equipment to narrowband emissions and determined that joining with Camden County and investing in its new, state of the art, 700 MHz digital trunked radio system that will accommodate

the long term needs of all of the Township's emergency first responders and citizens, was the best investment to meet the narrowband deadline. Camden County has designed, procured and is in the midst of deploying the new trunked radio system and anticipates the system will go live by the end of fourth quarter 2012 and have all agencies migrated off of the wide-band VHF channels, including the Voorhees Township first responders, by the end of first quarter 2013. Further, the Township will cease wide-band operations and will upgrade or replace all of the VHF repeaters by December 31, 2013.

Therefore, the Township respectfully requests that the Commission grant its request for a one (1) year waiver and extension of the narrowband deadline for its VHF Public Safety radio channels, in accordance with Sections 1.925 and 1.3 of the Commission's rules and the guidance set forth in the Public Notice. As stated, the Township, in coordination with Camden County, is working diligently to complete the transition to narrowband operations and imposing the deadline unduly burdensome and contrary to the public interest and significantly impact on residents of Voorhees Township and its emergency first responders. The Township has no reasonable alternative but to seek a waiver. Accordingly, the Township requests that the Commission grant the wavier relief sought herein.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Louis Bordi", with a circled "31" written above it.

Louis Bordi
Chief of Police
Voorhees Township Police Department
1180 White Horse Road
Voorhees, NJ 08043

APPENDIX-A
Voorhees Township VHF FCC Licenses

ID	Call Sign	Frequency (MHz)	Use
1	KB66528	153.785	Township Police
2	KDZ363	154.845	Township Police
3	KDZ363	155.745	Township Police
4	KNIC328	154.680	SPEN-1
5	KNIC328	155.475	SPEN-2

APPENDIX-B

**CAMDEN COUNTY
BOARD OF CHOSEN FREEHOLDERS MEETING
NOVEMBER 17, 2011 - 7:00 P.M.
CAMDEN COUNTY TECHNOLOGY CENTER
LEARNING THEATER ROOM 210 A-B
601 COOPER STREET
CAMDEN, NEW JERSEY 08102**

Resolutions 17 through 37 were adopted upon motion by Deputy Director McDonnell with a second by Freeholder Leonard and on roll call, all Freeholders present voted aye.

18. Resolution authorizing award of contract (State Contract #A-53804), by and between the Township of Voorhees (Department of Public Safety) and Motorola Solutions, Inc., for the 700 MHz Public Safety Communications System for the Township of Voorhees and Amending Resolution No. 23, adopted October 20, 2011.